

### REMARKS

Applicants have thoroughly considered the Examiner's remarks in the Office action and have amended the application to more clearly set forth aspects of the invention. This Amendment A amends claims 1, 5, 13, 14, 17, 23, 24, 30, 32, 33, 35, and 36, and cancels claims 4, 15, 16, and 30. No new matter has been added.

Claims 1-3, 5-14, 17-38, and 40 are thus presented in the application for further examination. Reconsideration of the application as amended and in view of the following remarks is respectfully requested.

Applicants request that the Examiner now have the drawings as originally filed reviewed and accepted.

#### **Objections to the Specification**

Applicants have amended the title to "TOPIC-BASED NOTIFICATION SERVICE" to be more descriptive. Thus, Applicants request the objection be withdrawn.

#### **Claim Rejections Under 35 U.S.C. § 101**

Claims 13 and 23-40 stand rejected under 35 U.S.C. § 101 for being inclusive of data signals that are not statutory subject matter. Claims 13, 23, 24, 27, and 32, as amended, recite "computer-readable storage media". Pages 22-23, paragraph 58 of the specification of the present application discloses "**computer readable media** comprise computer storage media and **communication media**." And, "**communication media** typically **embody computer readable instructions**, data structures, program modules, or other data **in a modulated data signal such as a carrier wave or other transport mechanism and include any information delivery media**" in contrast to "computer storage media include **volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage of information such as computer readable instructions, data structures, program modules or other data**." Thus, storage media does not include communication media including data signals. Therefore, Applicants request that the Examiner withdraw the rejection.

### Claim Rejections Under 35 U.S.C. § 102

Claims 1, 3-5, 7-24, 26-40 stand rejected under 35 U.S.C. §102(b) as being anticipated by Smith et al. (U.S. Pat. No. 5,790,790), hereinafter Smith. A claim is anticipated only if each and every element as set forth in the claim is disclosed, either expressly or inherently in a single prior art reference.<sup>1</sup> Applicants respectfully submit that each and every element as set forth in the recited claims is not found, either expressly or inherently in the Smith reference. Thus, Smith does not anticipate the claims.

Smith teaches a notification system for electronic documents. (Abstract). A store contains the documents and attributes. (Column 4, lines 20-39). The store generates store events, such as creation, deletion or modification of a store item and clients can listen to store events. (Column 4, lines 40-48). The pickup notifier listens for creation events and notifies recipients. (Column 5, lines 15-16). The notifier notifies a user via email. (Column 7, lines 4-10). The user can then log in and receive the document. (Column 8, lines 47-56). A client can log in to receive information on state of document, where it is and who has received it. (Column 9, lines 1-9).

#### Claims 1 and 37

In contrast, claim 1, as amended, recites

implementing a web service responsive to requests structured according to an extensible messaging framework;  
 receiving, at the web service, a request from a content provider, said request specifying a selected notification management function, said request being structured according to the messaging framework;  
 extracting request information from the request, said request information including at least a content provider identifier and **a plurality of topic identifiers**;  
 executing the selected notification management function based on the extracted request information **for each of the plurality of topic identifiers**; and  
**sending a response object to the content provider, said response object being structured according to the messaging framework, said response object containing information relating to either success or failure for the executed notification management function for each of the plurality of topic identifiers.**

For example, FIG. 5B illustrates a selected management function of for deleting a subscription (i.e., Unsubscribe). First, the content provider posts an Unsubscribe Request and the CPID context (e.g., content provider identifier) is retrieved from the request. The topic

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<sup>1</sup> M.P.E.P. § 2131. See also *Schering Corp. v. Geneva Pharmaceuticals*, 339 F.3d 1373, 1379 (Fed. Cir. 2003) (citing *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987)).

identifier is used to identify users (PUID) that have subscribed to the topic associated with the identifier. Next, the subscriptions for the identified users are deleted and, depending on the outcome, some result is added to the SubscribeResponse (e.g. response object). Also, a notification is sent to the user, telling him or her that the subscription has been deleted. The process repeats for each topic in the request, after which the response is returned.

As explained above, Smith teaches notification system for distributing documents to a plurality of users where the content provider specifies the users to be notified. Therefore, Smith does not anticipate or make obvious a **"said request information including at least a content provider identifier and a plurality of topic identifiers"** and **"executing the selected notification management function based on the extracted request information for each of the plurality of topic identifiers"** as recited by the claim. In light of the foregoing, Applicants submit claim 1 is allowable over the cited art. Claims 2, 3, and 5-13 depend from claim 1 and should be allowed for at least the same reasons as claim 1. Additionally, to the extent that claim 37, as amended, includes limitations similar to claim 1, claim 37 is allowable for at least the same reasons that claim 1 is allowable. Claims 38 and 40 depend from claim 37 and should be allowed for at least the same reasons as claim 37 should be allowed.

#### Claims 14, 24, and 32

Claim 14 as amended, recites

implementing a web service responsive to requests structured according to an extensible messaging framework;

receiving, at the web service, a request from a content provider, said request being structured according to the messaging framework;

extracting request information from the request, said request information including at least a content provider identifier, **a topic identifier, a selected notification management function to be performed by the notifications system, and a user identifier;**

querying a user profile store for profile information corresponding to the user identifier;

**determining routing information for a notification based on the profile information;** and

**creating a subscription for the user** corresponding to the topic identifier by executing the selected notification management function based on the extracted request information, **wherein the subscribed user receives at least one notification via the determined routing path relating to the subscribed topic from the content provider when subscribed thereto**, said notification including content provided by the content provider related to said subscribed topic.

For example, to subscribe a user, the content provider posts a Subscribe request (e.g. request). (Page 15, [0048]). A user identifier and topic identifier is extracted from the request. (Page 15, [0048]). A user profile service is queried to determine routing information user profile service. (Page 13, [0035-0036]). A subscription is created for the user corresponding to the topic identifier and the user receives at least one notification via the determined routing path relating to the subscribed topic from the content provider when subscribed thereto. (Page 8, [0026]). For example, a user may subscribe to weather topic alerts and receive a notification when there are significant changes in weather. (Page 8, [0026]).

As explained above, Smith merely teaches notification system for distributing documents to a plurality of users where the content provider specifies the users to be notified. Therefore, Smith does not anticipate or make obvious a " request information including at least a content provider identifier, **a topic identifier, a selected notification management function to be performed by the notifications system, and a user identifier**" and **"creating a subscription for the user** corresponding to the topic identifier by executing the selected notification management function based on the extracted request information, **wherein the subscribed user receives at least one notification via the determined routing path relating to the subscribed topic from the content provider when subscribed thereto**" as recited by the claim. In light of the foregoing, Applicants submit claim 14 is allowable over the cited art. Claims 17-23 depend from claim 14 and should be allowed for at least the same reasons as claim 14. Additionally, to the extent that claims 24 and 32, as amended, include limitations similar to claim 14, claims 24 and 32 are allowable for at least the same reasons that claim 14 is allowable. Claims 25-31 and 33-36 depend from claims 24 and 32, respectively, and should be allowed for at least the same reasons as claims 24 and 32 should be allowed.

### **Claim Rejections Under 35 U.S.C. § 103**

Claims 2, 21, 25, 36, and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith as applied to claims 1, 14, 24, 32, and 37 above, and further in view of Horvitz et al. (U.S. Pub. App. 2003/0101190), hereinafter Horvitz.

Horvitz teaches a schema based notification system using XML documents. (Abstract) The schema is used to organize data based on type of data (e.g., email, web sites, etc). (Page 3,

[0030]). A notification schema represents metadata about the subscription of a service to a source of information. (Page 7, [0064]).

None of the cited references teach or suggest a **sending a response object to the content provider, said response object being structured according to the messaging framework, said response object containing information relating to either success or failure for the executed notification management function for each of the plurality of topic identifiers or creating a subscription for the user** corresponding to the topic identifier by executing the selected notification management function based on the extracted request information, **wherein the subscribed user receives at least one notification via the determined routing path relating to the subscribed topic from the content provider when subscribed thereto** as claimed and described in the present application. Writing for the Supreme Court, Justice Anthony Kennedy observed that a patent claim is invalid for obviousness when the invention combines familiar elements according to known methods to produce no more than predictable results. *KSR International Co. v. Teleflex, Inc.* U.S., No. 04-1350, 4/30/07. However, in this rejection, neither the **element** of the plurality of topic **identifiers** nor the **result** of **sending a response object to the content provider** is found in the combined art. Additionally, in this rejection, neither the **element** of the **topic identifier** nor the **result** of **the subscribed user receives at least one notification via the determined routing path relating to the subscribed topic from the content provider when subscribed thereto** is found in the combined art

None of the above references are cited for, nor do any of these references teach or suggest "**sending a response object to the content provider**" and "**the subscribed user receives at least one notification via the determined routing path relating to the subscribed topic from the content provider when subscribed thereto**" as claimed and described in the present application. Accordingly, claims 1, 14, 24, 32, and 37 are allowable over the cited art. Claims 2, 21, 25, 36, and 38 depend from claims 1, 14, 24, 32, and 37, respectively and are allowable for at the least the same reasons as claims 1, 14, 24, 32, and 37.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith as applied to claim 1 above, and further in view of Linderman (U.S. Pub. App. 2002/0032790), hereinafter Linderman.

Linderman teaches a system for communicating over the internet using a single protocol. The method of this references uses a translator box to translate SOAP packet on second side of firewall to appropriate command for network element.

None of the above references are cited for, nor do any of these references teach or suggest **"sending a response object to the content provider"** and **"the subscribed user receives at least one notification via the determined routing path relating to the subscribed topic from the content provider when subscribed thereto"** as claimed and described in the present application. Accordingly, claim 1 is allowable over the cited art. Claim 6 depends from claim 1 and is allowable for at the least the same reasons as claim 1.

### **Conclusion**

Applicants submit that the claims are allowable for at least the reasons set forth herein. Applicants thus respectfully submit that the claims as presented are in condition for allowance and respectfully request favorable reconsideration of this application.

Although the prior art made of record and not relied upon may be considered pertinent to the disclosure, none of these references anticipates or makes obvious the recited aspects of the invention. The fact that Applicants may not have specifically traversed any particular assertion by the Office should not be construed as indicating Applicants' agreement therewith.

**Applicants wish to expedite prosecution of this application. If the Examiner deems the application to not be in condition for allowance, the Examiner is invited and encouraged to telephone the undersigned to discuss making an Examiner's amendment to place the application in condition for allowance.**

The Commissioner is hereby authorized to charge any deficiency or overpayment of any required fee during the entire pendency of this application to Deposit Account No. 19-1345.

Respectfully submitted,

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